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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,159	08/08/2001	Stephen Clark Purcell	274754 BEL-033	3076

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EXAMINER
BULLOCK JR, LEWIS ALEXANDER

ART UNIT	PAPER NUMBER
2195	

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/925,159	PURCELL, STEPHEN CLARK
	Examiner	**Art Unit**	
	Lewis A. Bullock, Jr.	2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *13 March 2006*.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-21* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-21* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 1-3, 5, 7-10, 12, 14-17, 19 and 21 are rejected under 35 U.S.C. 102(b) as

being anticipated by NECHES (U.S. Patent 5,276,899).

As to claim 1, NECHES teaches a method comprising: serially receiving, from a

source (via receiving from a host computer to an interface processor), a plurality of

forward messages (requests) each addressed to a corresponding destination among a

plurality of destinations (access processors) (col. 5, lines 10-50; column 35, lines 30-50;

col. 37, line 52 – col. 38, line 15); receiving a plurality of availability signals (status

indicators of the processors), each availability signal indicating that one of the

destinations (access processors) is available to accept its corresponding forward

message (whether the processor is busy, idle, etc.) (col. 6, lines 14-18; column 35, lines

30-50) for first forward messages whose corresponding first destinations are available,

simultaneously (concurrently) sending the first forward messages (message packet) to

their corresponding first destinations (access processor); subsequent to receiving the

first forward messages, simultaneously (concurrently) receiving, after a predetermined

period of time, a plurality of reverse messages (response information) from the first

destinations (access processors), each reverse message (response information)

corresponding to one of the first forward messages (message packets); and serially

sending the reverse messages (response messages) to the source (via the interface

processor relaying the result to the host computer) (col. 5, lines 10-50; column 35, lines

30-50; col. 4, line 29 – col. 6, line 22; col. 11, line 29 – col. 12, line 42; col. 15, line 25 –

col. 18, line 21; col. 43, line 48 – col. 44, line 57).

As to claim 2, NECHES teaches the source (host computer) identifies each of the

forward messages (requests / message packets) by a different tag (transaction number

/ TN), further comprising: placing a tag (transaction number / TN) in a delay buffer (H.S.

RAM / incoming or outgoing message storage) when sending to a destination (other

processor) the forward message (message packet) identified by that tag, wherein the

delay buffer implements a delay equal to the predetermined period of time such that the

tag is available when receiving from memory the reverse message (response

information) corresponding to the forward message (message packet); and sending the

tag to the source (host computer) with the reverse message (response information),

whereby the source (host computer) associates the reverse message (response

information) with the forward message (message packet) (col. 23, line 50 – col. 28, line

44).

As to claim 3, NECHES teaches associating a priority (priority) with each forward

message (message packet); and sending a forward message (message packet) to a

destination (other processor) when that forward message (message packet) has a

higher priority than other forward messages (message packets) addressed to the

destination (other processor) (col. 4, line 29 – col. 6, line 22; col. 11, line 29 – col. 12,

line 42; col. 15, line 25 – col. 18, line 21).

As to claim 5, NECHES teaches associating a priority (priority) with each reverse

message (response information); and sending a reverse message (response

information) to the source (host computer) when that reverse message (response

message) has a higher priority than other reverse messages (response messages) (col.

4, line 29 – col. 6, line 22; col. 11, line 29 – col. 12, line 42; col. 15, line 25 – col. 18, line

21).

As to claim 7, NECHES teaches each destination is a memory bank (via the

processors being access module processors controlling different secondary storages),

each forward message (message packet) is a memory transaction (performing

operations on the storages), and each reverse message (response information) is the

result of one of the memory transactions (col. 4, line 29 – col. 6, line 22; col. 11, line 29

– col. 12, line 42; col. 15, line 25 – col. 18, line 21).

As to claims 8-10, 12 and 14, reference is made to an apparatus that is similar to

the method of claims 1-3, 5 and 7 and is therefore met by the rejection of claims 1-3, 5

and 7 above.

As to claims 15-17, 19 and 21, reference is made to a computer program product

that is similar to the method of claims 1-3, 5 and 7 and is therefore met by the rejection

of claims 1-3, 5 and 7 above.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 4, 6, 11, 13, 18 and 20 are rejected under 35 U.S.C. 103(a) as being

unpatentable over NECHES (U.S. Patent 5,276,899).

As to claims 4 and 6, NECHES teaches the forward message (message packets)

and reverse messages (response information) having priorities and processing the

messages based on their priorities (col. 4, line 29 – col. 6, line 22; col. 11, line 29 – col.

12, line 42; col. 15, line 25 – col. 18, line 21; col. 43, line 48 – col. 44, line 57).

However, the NECHES does not teach the priorities represent the age of the message.

"Official Notice" is taken in that it is well known in the art at the time of the invention that

a priority represents the age of the message, i.e. how long ago the message was sent,

or what time it was generated. Therefore, it would be obvious to one skilled in the art to

combine the teachings of NECHES with the well-known technique of priority

representation in order to avoid excessively delaying low priority messages.

As to claims 11 and 13, reference is made to an apparatus that is similar to the

method of claims 4 and 6 and is therefore met by the rejection of claims 4 and 6 above.

As to claims 18 and 20, reference is made to a computer program product that is

similar to the method of claims 4 and 6 and is therefore met by the rejection of claims 4

and 6 above.

Response to Arguments

5.   Applicant's arguments filed March 13, 2006 have been fully considered but they

are not persuasive.   Applicant argues that the Neches does not teach receiving forward

messages addressed to destinations and receiving availability signals from destinations

that destinations that can accept their respective forward message. The examiner

disagrees. Neches teaches that a source (host computer) generates requests that are

sent at least one interface processor to be relayed to access module processors that

control the stored information wherein the network delivers such requests on a

prioritized basis and is capable of directing the request to either the specific

processor(s) or to the class of all processors which have the information or capabilities

needed to process the packet (col. 5, lines 10-50). Neches also teaches the invention

allows for the ascertaining of the status of each resource (processor) in the network

(col. 6, lines 14-18). An example of such is detailed on column 35, lines 30-50, wherein

after a primary message has been received, all processors generate one of the ACK,

NAK, or NAP responses (acknowledgement messages). After receiving one of the

response messages or after a delay, processors may attempt to transmit a primary

message. Therefore, the limitation of receiving forward messages addressed to

destinations and receiving availability signals from destinations that can accept their

forward message is met by the teachings of NECHES since requests are directed to a

plurality of processors or class of processors that indicate whether they can accept the

message before it is actually transmitted.

Applicant then argues that Neches does not teach the limitation of sending

forward messages to available destinations and receiving corresponding reverse

messages. The examiner disagrees. As outlined above, Neches teaches sending

requests to available destinations (capable destinations). Neches teaches that the

receiving processors after performing an operation generate a result and return the

result to the requestor (via returning processed messge packets back to the processor)

(see column 5, lines 10-48; and column 6, lines 14-15). Therefore, the claims are met

by the teaching of Neches and the rejection is maintained.

Conclusion

6.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.
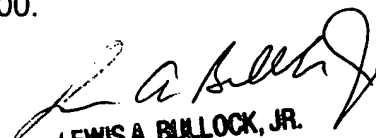
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lewis A. Bullock, Jr. whose telephone number is (571) 272-3759. The examiner can normally be reached on Monday-Friday, 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER

June 9, 2006